

Appln No. 10/747,774
Amdt date June 2, 2010
Reply to Office action of March 2, 2010

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend claims 1, 3, 7 and 17-21.

1. (Currently Amended) An irrigation ablation probe comprising:
a probe body having proximal and distal ends and being generally rigid to resist bending during use, wherein the distal end of the probe body is fixedly bent at an angle α ranging from about 60 to about 140°, the probe body comprising:
a tubing having proximal and distal ends and at least one lumen extending therethrough,
an elongated tip electrode mounted at the distal end of the tubing, the tip electrode having an exposed ~~length~~ sidewall along which is positioned at least one irrigation opening through which fluid can pass, wherein the tip electrode is configured to ablate tissue along the exposed ~~length~~ sidewall to form a lesion, and
means for introducing fluid through the at least one irrigation opening of the tip electrode; and
a handle mounted to the proximal end of the probe body.

2. (Original) An irrigation ablation probe according to claim 1, wherein the introducing means comprises an infusion tube having proximal and distal ends, the infusion tube extending through one of the at least one lumens of the tubing, wherein the distal end of the infusion tube is in fluid communication with the at least one irrigation opening in the tip electrode.

3. (Currently Amended) An irrigation ablation probe comprising:
a probe body having proximal and distal ends and being generally rigid to resist bending during use, wherein the distal end of the probe body is fixedly bent at an angle α ranging from about 60 to about 140°, the probe body comprising:
a tubing having proximal and distal ends and at least one lumen extending therethrough,
an elongated tip electrode mounted at the distal end of the tubing, the tip electrode having an exposed ~~length~~ sidewall along which is positioned at least one irrigation opening through which fluid can pass, wherein the tip electrode is configured to ablate tissue along the exposed ~~length~~ sidewall to form a lesion,
an infusion tube having proximal and distal ends, the infusion tube extending through one of the at least one lumens of the tubing, wherein the distal end of the infusion tube is in fluid communication with the at least one irrigation opening in the tip electrode, and
a stiffening wire extending through another of the at least one lumens of the tubing; and
a handle mounted to the proximal end of the probe body.
4. (Original) An irrigation ablation probe according to claim 3, wherein the probe body has a length ranging from about 3.5 inches to about 12 inches.
5. (Original) An irrigation ablation probe according to claim 3, wherein the probe body has a length ranging from about 5 inches to about 10 inches.
6. (Original) An irrigation ablation probe according to claim 3, wherein the probe body has a length ranging from about 7 inches to about 8 inches.

7. (Currently Amended) An irrigation probe comprising:
a probe body having proximal and distal ends and being generally rigid to resist bending during use, wherein the distal end of the probe body is fixedly bent at an angle α ranging from about 60 to about 140°, the probe body comprising:
a tubing having proximal and distal ends and first and second lumens extending therethrough,
an elongated tip electrode mounted at the distal end of the tubing, the tip electrode having an exposed ~~length~~ sidewall along which is positioned at least one irrigation opening through which fluid can pass, wherein the tip electrode is configured to ablate tissue along the exposed ~~length~~ sidewall to form a lesion,
an infusion tube having proximal and distal ends, the infusion tube extending through the first lumen of the tubing, wherein the distal end of the infusion tube is in fluid communication with the at least one irrigation opening in the tip electrode, and
a stiffening wire having proximal and distal ends that extends through the second lumen of the tubing; and
a handle mounted to the proximal end of the probe body.
8. (Original) An irrigation ablation probe according to claim 3, wherein the stiffening wire is made of stainless steel.
9. (Original) An irrigation ablation probe according to claim 3, wherein the stiffening wire is made of a malleable material.
10. (Original) An irrigation ablation probe according to claim 1, wherein the at least one irrigation opening comprises a longitudinal passage extending out the distal end of the tip electrode.

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11. (Original) An irrigation ablation probe according to claim 1, wherein the at least one irrigation opening comprises at least one transverse passage.

12. (Original) An irrigation ablation probe according to claim 1, wherein the tip electrode is porous.

13. (Original) An irrigation ablation probe according to claim 1, further comprising a temperature sensing means mounted in a blind hole in the tip electrode.

14. (Original) An irrigation ablation probe according to claim 7, wherein the probe body has a length ranging from about 3.5 inches to about 12 inches.

15. (Original) An irrigation ablation probe according to claim 7, wherein the probe body has a length ranging from about 5 inches to about 10 inches.

16. (Original) An irrigation ablation probe according to claim 7, wherein the probe body has a length ranging from about 7 inches to about 8 inches.

17. (Currently Amended) An irrigation probe comprising:
a probe body having proximal and distal ends and being generally rigid to resist bending during use, wherein the distal end of the probe body is fixedly bent at an angle α ranging from about 60 to about 140°, the probe body comprising:

a tubing having proximal and distal ends and at least one lumen extending therethrough,

an elongated tip electrode mounted at the distal end of the tubing, the tip electrode having an exposed ~~length~~ sidewall along which is positioned at least one irrigation opening through which fluid can pass, wherein the tip electrode is configured to ablate tissue along the exposed ~~length~~ sidewall to form a lesion,

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an infusion tube having proximal and distal ends, wherein the distal end of the infusion tube is in fluid communication with the at least one irrigation opening in the tip electrode, and

a stiffening wire, wherein the stiffening wire and the infusion tube extend through the same one of the at least one lumens of the tubing; and

a handle mounted to the proximal end of the probe body.

18. (Currently Amended) An irrigation ablation probe according to claim 1, wherein the exposed ~~length~~ sidewall of the tip electrode ~~ranges~~ has a length ranging from about 2mm to about 10mm.

19. (Currently Amended) An irrigation ablation probe according to claim 3, wherein the exposed ~~length~~ sidewall of the tip electrode ~~ranges~~ has a length ranging from about 2mm to about 10mm.

20. (Currently Amended) An irrigation ablation probe according to claim 7, wherein the exposed ~~length~~ sidewall of the tip electrode ~~ranges~~ has a length ranging from about 2mm to about 10mm.

21. (Currently Amended) An irrigation ablation probe according to claim 17, wherein the exposed ~~length~~ sidewall of the tip electrode ~~ranges~~ has a length ranging from about 2mm to about 10mm.